

May 17, 2007

Mr. Michael F. Gearhead, Director
Region 10 Office of Water and Watersheds
United States Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

Via Email: Gearheard.Mike@epamail.epa.gov

RE: COMMENTS ON HARSB DRAFT NPDES PERMIT NO. ID-002659-0

Dear Director Gearhead:

Following up comments presented at the Public Hearing on April 4, 2007, for the above-referenced draft permit, please consider this additional information.

HARSB has been very progressive in complying with the standards for phosphorus reduction as they were developed in previous State of Washington Total Maximum Daily Loads (TMDLs) and cooperative efforts dating back to the 1989 Spokane River Phosphorus Management Plan. HARSB installed the first only land application reuse system that diverted flows from the Spokane River during the critical low flow period in 1994. We have also allowed Blue Water Technology to install a pilot system to evaluate alternative phosphorus removal systems. The HARSB treatment system has consistently met the criteria in its NPDES Permits as well as the criteria and strategies under the Spokane River Phosphorus Management Plan.

1. Our current dilemma is that the State of Washington adopted water quality standards for Lake Spokane (formerly Long Lake) classifying it as a "lake" with no allowable measurable decrease in dissolved oxygen (DO) from "natural conditions" (see **attached** Exhibit 1). This in itself is a factual contradiction because the reservoir is a manmade impoundment, not a lake that ever existed in an actual natural condition. The impoundment behind Long Lake Dam was constructed solely for economic gain through power generation for Washington Water Power (now Avista Corporation), a State of Washington Corporation. Increased property values along the "lake" shores also benefit the State of Washington. Idaho dischargers are being unfairly targeted to help Washington pay for solving a water quality problem that they have created and exclusively benefited from. The free-flowing reaches of the Spokane River continue to demonstrate very few water quality impairments, as demonstrated by EPA and Washington in the recent modeling efforts for this permit. While EPA has attempted to balance this inherent unfairness, Idaho dischargers are still being

required to help pay for solving a problem that was created by a for-profit corporation's construction of an impoundment.

2. Based on the EPA and Washington computer model of the river (see **attached** Exhibit 2), even if all the point dischargers were removed along with a substantial loading from the non-point dischargers, the Long Lake reservoir would still not meet the Washington 8.0 mg/L DO water quality standard. A Use Attainability Analysis (UAA) was completed by the Spokane River dischargers to address this issue, but was apparently rejected by the Washington DOE. HARSB reserves the right to enter into a UAA process if necessary.
3. Representatives from the HARSB attended the approximately 3-year-long TMDL process. The **attached** Exhibit 3 is the draft TMDL Figure 10 Summary - Spokane River Proposed TMDL and Phosphorus Loading Reduction Strategy, 9/20/04. At the hearing, there were numerous pleas for a basin approach in that EPA should not have interceded in providing separate analyses for the Idaho dischargers. The referenced loading reduction table shows that the ultimate loading from the point dischargers should be reduced to 4.6 pounds of phosphorus per day. We would like to point out that of the 4.6 pounds per day (ppd) of phosphorus allowed; only 0.2 pounds (4 percent) was allocated to the Idaho dischargers. Even in the UAA prepared by the Washington dischargers, the Idaho dischargers were not given any consideration for increased loading; it was all allocated to the Washington dischargers.

This restriction would cause severe limitations on the Idaho dischargers because the loading was less than one half the 0.44 pounds that should have been allocated. Idaho dischargers were definitely not given a realistic and equitable portion of the loading in the Spokane River. We are fortunate that EPA did intercede and provide leadership for equitably allocating loading to the Spokane River. The Washington schedule (and mirrored in the HARSB Compliance Schedule) essentially allows nine years to come into compliance with the interim criteria of approximately 50 micrograms of phosphorus. This is longer than one permit cycle; it will take at least three permit cycles before the actual impact of the phosphorus reduction program can be observed in Long Lake to allow the next phase of limitation. EPA's approach in the draft HARSB permit attempts to remedy this inequity between permitting approaches and is supported by HARSB.

4. Another issue that EPA has resolved is providing a dynamic permit. The **attached** Exhibit 4 was provided from Washington DOE files. Under the circled column titled "Allowable Idaho TP pollution in the Spokane River at the State Line," this shows that a substantially higher phosphorus loading in April, May, June, and October (the shoulder season) can be discharged to the river. HARSB

provides diversion from the river to reuse during the July, August, and September critical period as required in the current permit. HARSB is the only discharger in Idaho and Washington with the requirement for diversion during the low-flow period. HARSB did not protest the requirement and increased the connection fees to at least double that of the other dischargers to pay for the land application system. The no-discharge requirement during the summer placed an unfair burden on the HARSB system because the other entities have substantially increased the flows and loading to the river year round. We see no difference between a new connection to any of the dischargers and to HARSB? All are from a connected urban area.

The proposed Washington TMDL loading restriction (Exhibit 3) of 10 $\mu\text{g}/\text{l}$ extended from April through October. This favors the major dischargers who would have difficulty in implementing a substantial amount of diversion during the August critical period. EPA must be commended for providing a defensible dynamic permit that would encourage continued reuse during the low-flow critical period by allowing higher loadings in the shoulder months (April, May, and October) in conformance with the available capacity indicated in Exhibit 4. Therefore, HARSB will not have to install extensive technology for phosphorus removal in the shoulder season. Storage during the shoulder season would have required hundreds of millions of gallons of lagoons over the Rathdrum Prairie Sole Source Aquifer.

5. The **attached** Exhibit 5 includes Figure 9 from the DOE TMDL website, which provides the basic breakout sources of phosphorus loading. Approximately half of the loading is from the point dischargers in 2003. The TMDL outlined a need for reduction of phosphorus from the non-point sources. There was a question regarding the significance of the non-point once the point discharger's phosphorus loadings are reduced to an interim standard of approximately 50.0 micrograms (presented in Item 7). Of interest is that the vast majority of the loading is from the Washington dischargers and that Idaho accounts for only a small portion of the loading.
6. The loadings from Figure 9 from the TMDL were reduced to the **attached** Exhibit 6 using a spreadsheet. A new category for recreation was added to the pie chart because it becomes a significant contributor when the point dischargers approach 10.0 micrograms. There is a substantial loading from docks, leaching from septic tanks, grass fertilization, swimming, and boating.
7. Exhibit 7 shows the relative significance of the combined wastewater treatment plant loading at the 50.0 micrograms. This illustrates how the point loadings have been reduced to above 1/10 of the loading. Of interest is the non-point reduction at approximately 20 percent, or 127 pounds, required in

the TMDL Figure 3. This is more than total loading from the Lake Coeur d'Alene segment on the pie chart. This shows how extensive the non-point reduction is required to even come close to compliance with the Washington standard for Long Lake. It has not been fully explored if this major amount of non-point phosphorus can be reduced even in a 20-year period.

8. Exhibit 8 presents the summary of the dischargers, including 10.0 micrograms loading at the current wastewater treatment plant flows. This shows that the reduction from 50 micrograms to 10 micrograms is not significant compared to the other sources. This shows the burden placed on the point dischargers to reduce loading. No specific reduction of the non-point portion has been documented. Also, the combined loading from the point dischargers would be less than that of the estimated loading from recreation.

In summary, Washington adopted a Water Quality standard for Long Lake Reservoir that is applicable for lakes and is not practically achievable. The computer model indicates that all point dischargers must remove the discharge from the river or reduce the phosphorus to less than 10 parts per billion (ppb). No full-scale technology has been demonstrated to achieve this load. A UAA was prepared by the discharges that showed that the standard was not achievable. The UAA was rejected by Washington DOE to avoid a lawsuit. A Managed Implementation Plan (MIP) and a Memorandum of Agreement (MOA) were developed in Washington to address a realistic phased implementation of phosphorus reduction over a 20-year period. The MIP and MOA were commendable efforts to allow the Spokane Valley to build a new wastewater treatment plant and reduce the combined phosphorus loading to the Spokane River to less than 50 ppb in ten years, or over 90 percent. Combined with the 90 percent plus reduction on a similar schedule by the Idaho dischargers, the loadings will be reduced to that presented in Exhibit 7.

The unachievable Water Quality standard of natural conditions discussed in Item 1 has created an atmosphere of continued litigation rather than a solution to the issues at hand. The only long-term solution is to complete a UAA and adopt an achievable Water Quality standard for Long Lake.

Please consider these comments as you move forward with finalizing these permits.

Sincerely,

Hayden Area Regional Sewer Board

City of Hayden

Gerry House, Chairman

Jay Townsend, Administrator